Crash! Boom! A Math Tale by Robie H. Harris

about the math

Crash! Boom! has ideas about counting, measurement, and spatial relationships. While reading the story, your child can learn:

- How we can count the number of blocks as we add more to find the total. Elephant starts with 2 blocks then adds 2 more. Elephant counts 1, 2, 3, 4 to find out that now there are 4 blocks.
- How to think about measurement. To make a *tall* tower, Elephant stacks the 4 blocks with their *taller* side facing up and then 8 with their *shorter* side facing up. But both towers are the same height.
- How spatial and measurement words can mean the opposite of one another. For example, Elephant builds a tower *up* but when it crashes it comes *down*.

words to learn

About numbers: 1, 2, 3, 4, 5, 6, 7, 8, more
Spatial words: up, down, flat
Measurement words: tall, short, as tall as, shorter than

tips and questions for reading

Here are some examples of questions you can ask your child while reading the story:

Guess how many blocks Elephant will use: ***If Elephant wants to build a tower as tall as itself, how many blocks like these do you think Elephant will use?***

Notice what happens to the total number of blocks when we add more: ***Elephant started with two blocks and then added two more. Let's count to find out how many blocks Elephant has now.***

Discuss math words that are opposite: ***Up is the opposite of down and tall is the opposite of short. Can you think of two more words that are opposites?***

Try to come up with your own questions, too!

card activities

Preparation:

- Cut out the activity cards along the black lines.
- Cut out the elephant along the black outline so no white is showing.

Also needed:

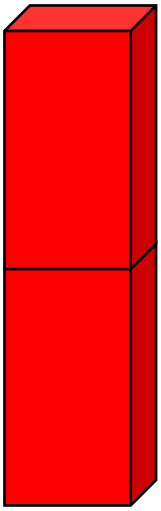
- ◊ Wooden or foam blocks, as shown in pictures
  OR
- ◊ Print out and use the block cut-outs on the last two pages

Play:

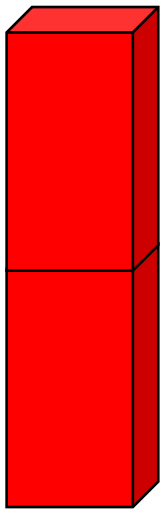
- These activities can either be done in sets (entire pages), or focusing on one level at a time (e.g., doing all Question 1 activities, then doing Questions 2 and 3, and last, Question 4 activities).
- Choose an activity card. Have your child complete the task shown. For Question 1 activities, have your child build the tower shown using the color blocks shown. For Question 2 activities, have your child predict whether the tower or elephant cut out will be taller, followed by Question 3 activities where your child should directly compare the tower and elephant to find out.
- Help your child, as needed, to complete each activity. If your child is struggling, try to use questions to guide your child's efforts rather than giving them the answers. ***Do you remember what comes after 5? Can you point and count with me?***
- Focus on developing measurement vocabulary and good measurement and comparison skills—for example, making sure that both objects being compared have a common baseline.

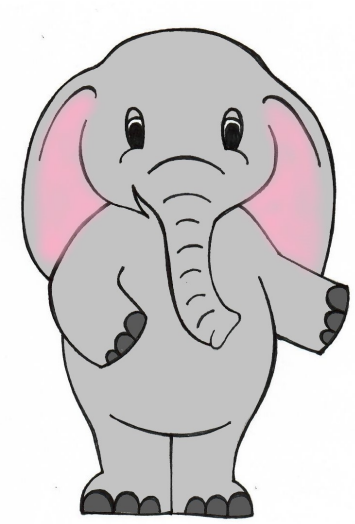
For more ideas on teaching math to your child, go to dreme.stanford.edu/mathfest

1. Can you build?



2. (Predict) Which do you think is taller?





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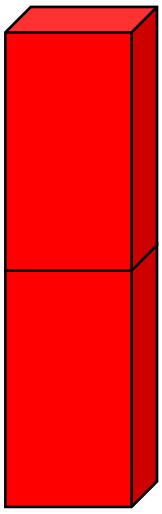

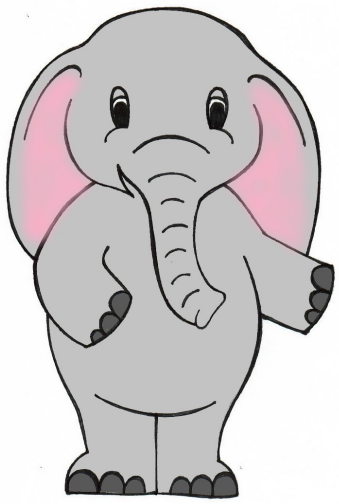

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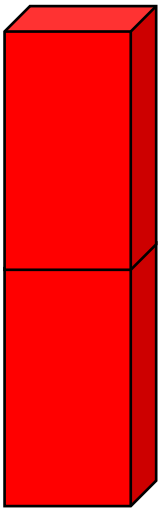

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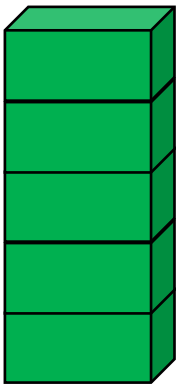

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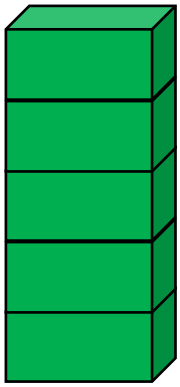

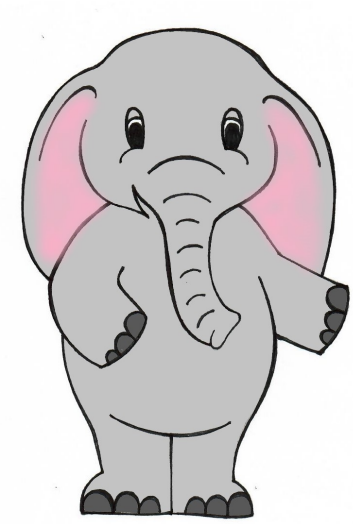

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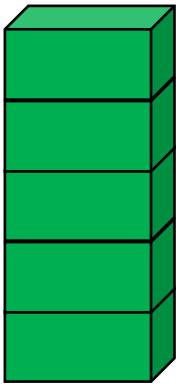

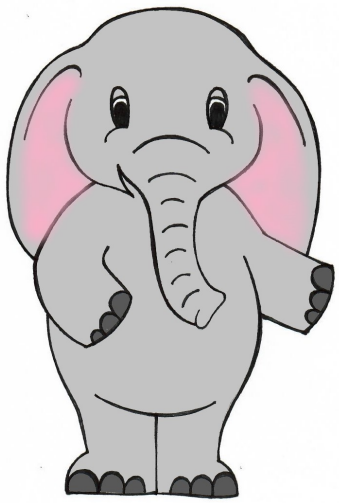

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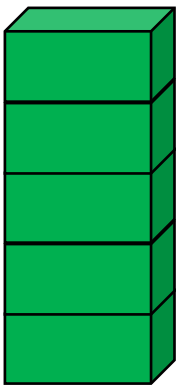

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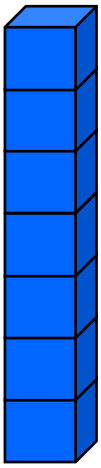

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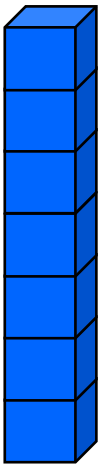

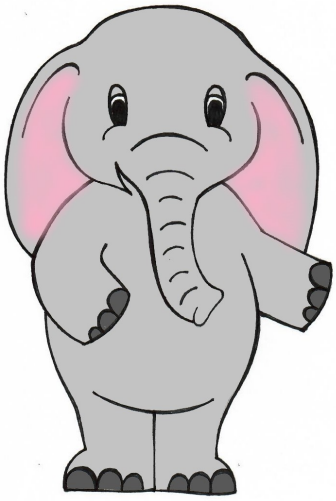

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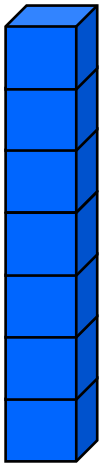

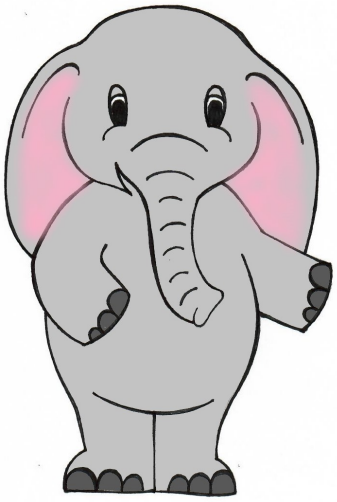

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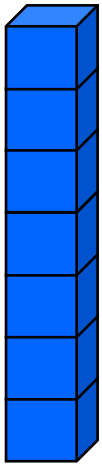

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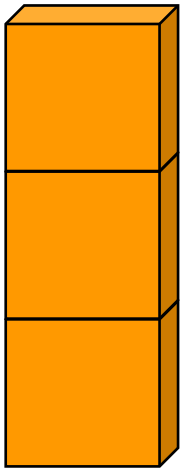

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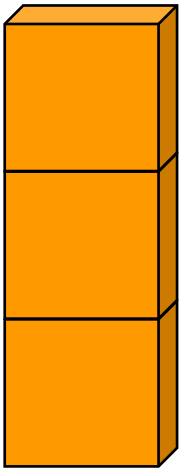

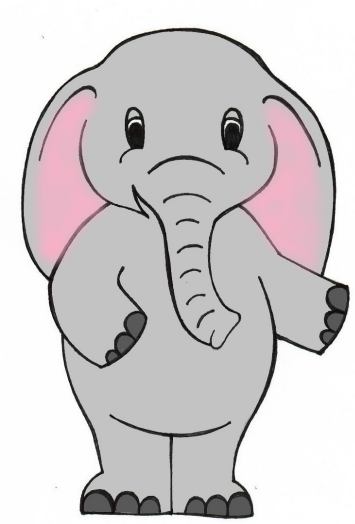

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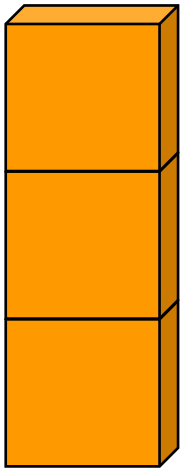

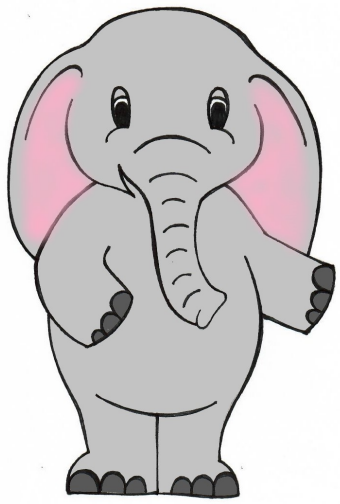

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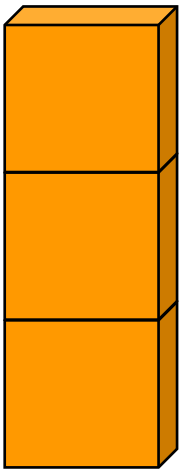

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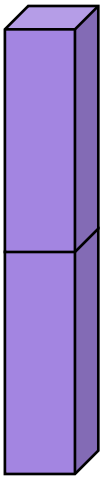

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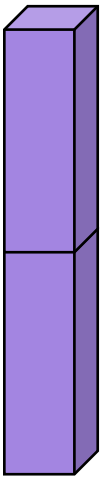

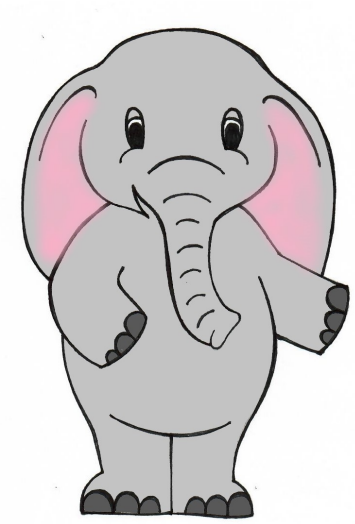

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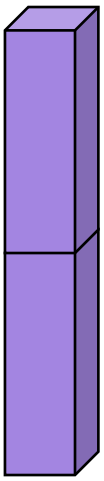

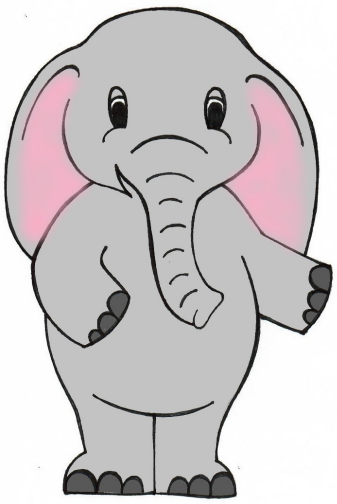

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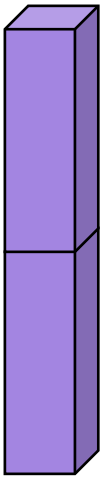

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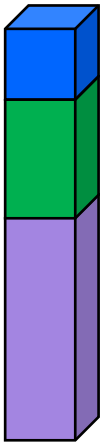

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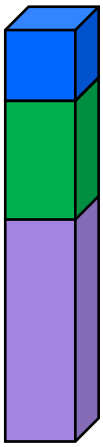

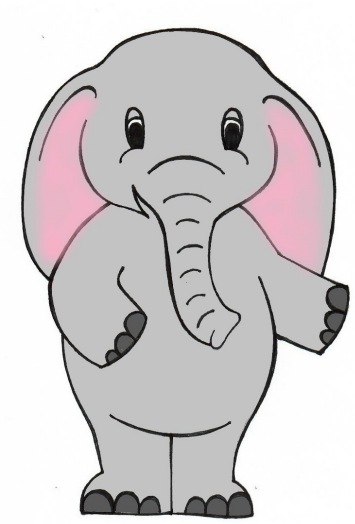

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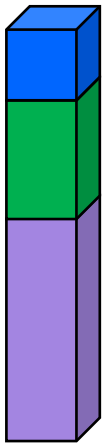

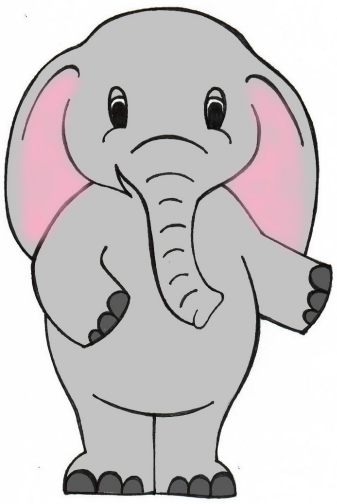

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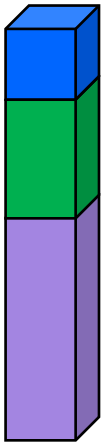

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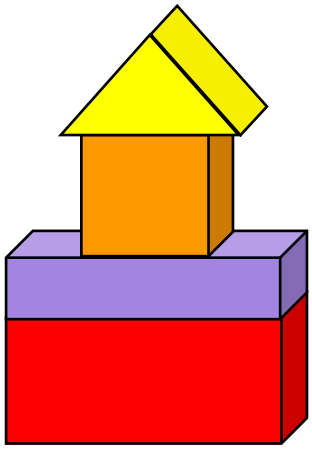

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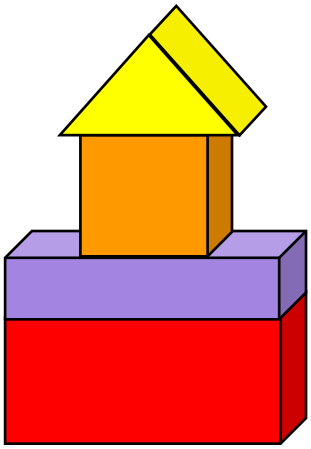

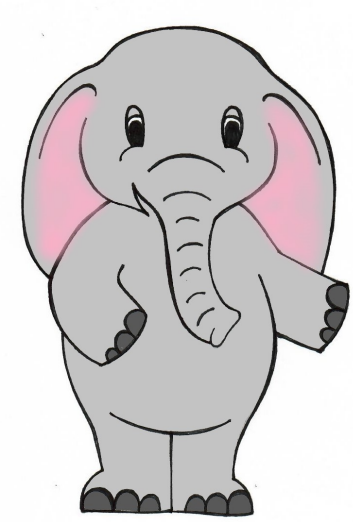

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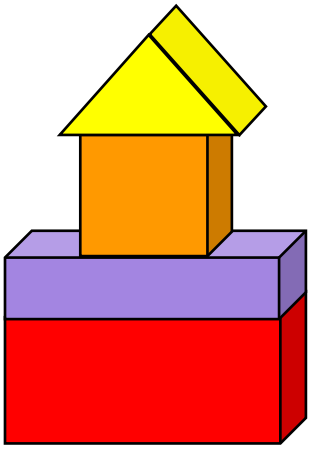

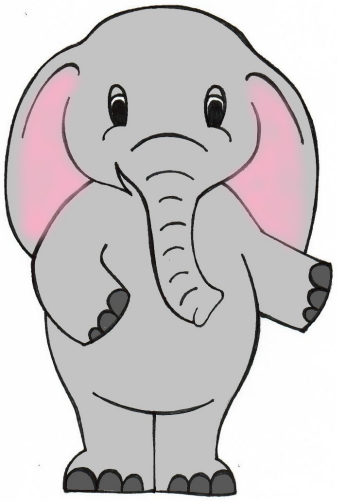

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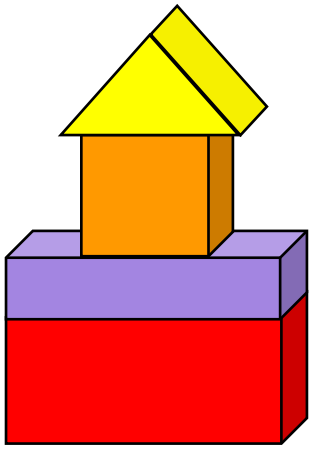
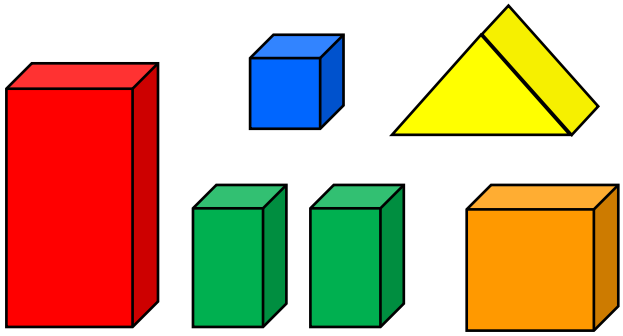
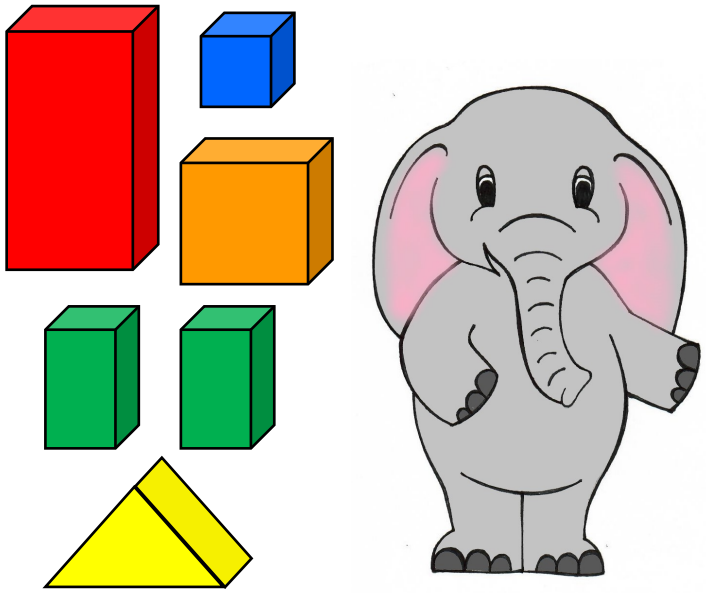


1. Can you build your own tower with these blocks?



2. (Predict) Which do you think is taller?

(Your tower of blocks)



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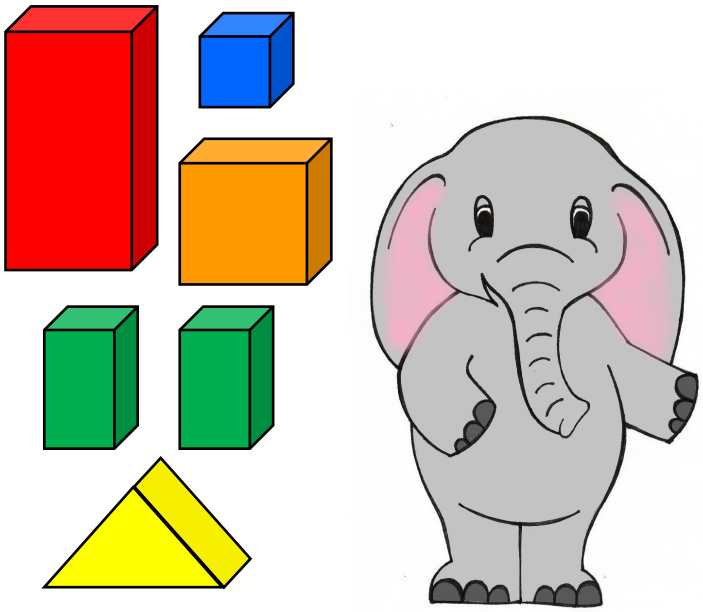

4. Can you build a tower shorter than this one?

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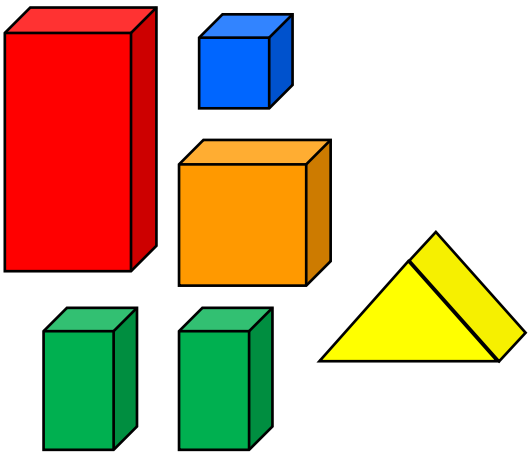
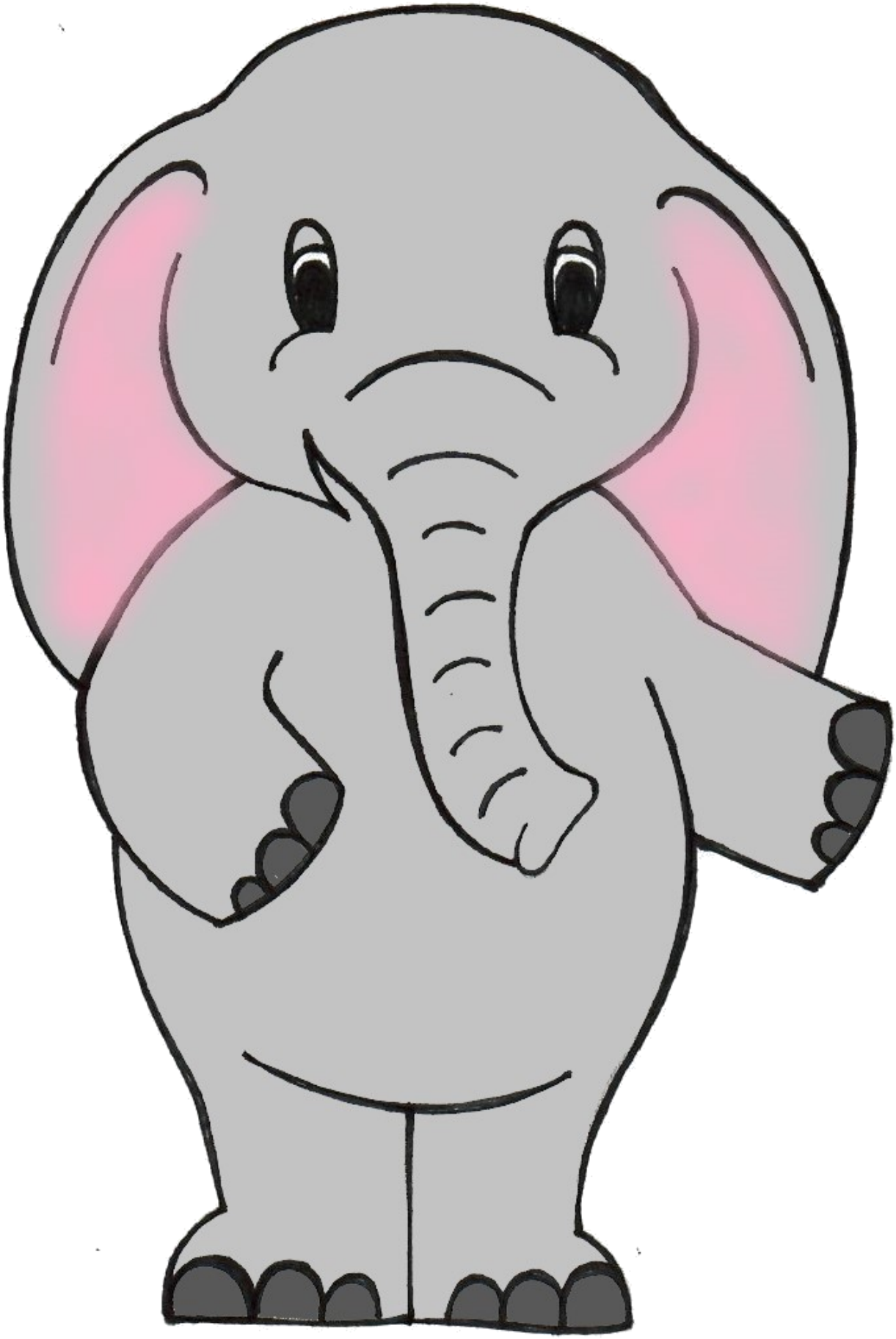
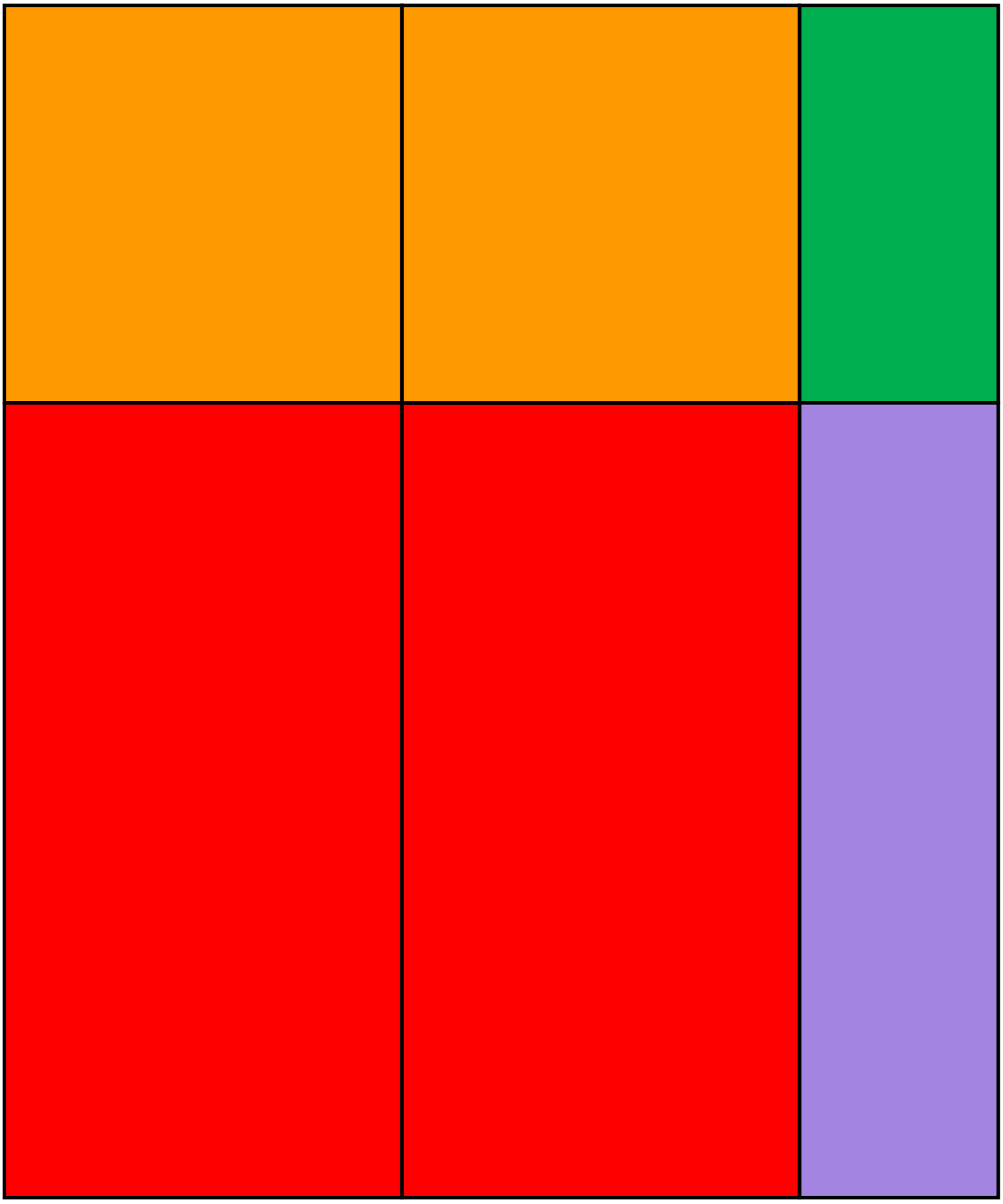




Optional Page



Optional Page